VIA ELECTRONIC MAIL

January 23, 2024

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 7
615 Erie Boulevard West
Syracuse, New York 13204-2400
Attn: Karen A. Cahill, Project Manager

Subject: **Former Emerson Power Transmission (EPT), Ithaca, NY Site No. 755010**
Quarterly Free Product Surveillance Report No. 031 – First and Second Quarter 2023
620 South Aurora Street, Ithaca, New York

Dear Karen:

On behalf of Emerson, WSP USA Inc. is submitting Quarterly Free Product Surveillance Report No. 031 for the former Emerson Power Transmission site in Ithaca, New York. This report summarizes the semi-annual free product monitoring and recovery activities for the first and second quarters of 2023 at groundwater wells that have free product present in them which include MW-8B, LBA-MW-35, LBA-MW-39, MW-50-160D, and MW-47A as shown on enclosed Figure 1. Absorbent socks continuously collected free product throughout the first quarter, and socks are typically replaced quarterly.

In accordance with the Buildings 3 and 4 Non-Aqueous Phase Liquid (NAPL) Observation Well Work Plan, observation wells were installed between February 27 and February 28. Four free product observation wells (OW-1, OW-2, OW-3, and OW-4) were installed in Building 9, behind the eastern wall of Building 3 and Building 4. Free product was monitored weekly for approximately one month on March 1, March 8, March 14, March 20, March 30, and April 14. During these measurement dates, no free products were observed in the observation wells.

During the January event, new free product absorbent socks were not deployed as is typically done quarterly due to no measurable product in any of the free product monitoring wells. Based on the absence of measurable free product during the first quarter, free product monitoring and recovery was not completed during the second quarter of 2023.

SUMMARY OF RELEVANT FINDINGS

Quarterly groundwater elevation and light-phase free product monitoring and recovery was conducted on January 17, 2023. Free product recovery is conducted using free product absorbent socks at each location and bailers, where appropriate. Following the retrieval of the free product absorbent socks, a new free product absorbent sock is deployed at each location to collect the free product. The deployment of new absorbent socks was not completed during the January event due to no measurable product in any of the monitoring wells.

Free product was observed in MW-47A during site activities in September 2022; subsequently, MW-47A was added to the free product surveillance monitoring program. No absorbent sock is deployed in MW-50-160D due to no measurable free product observed.

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MW-8B FREE PRODUCT MONITORING & RECOVERY

No free product was detected during the January event. In total, 0.44 gallons of the free product was recovered during this reporting period; a total of 20.51 gallons of the free product has been removed since recovery was initiated in August 2016 (Table 1).

LBA-MW-35 FREE PRODUCT MONITORING & RECOVERY

No free product was detected during the January event. In total, 0.44 gallons of the free product were recovered during this reporting period; a total of 14.71 gallons of the free product have been removed since recovery was initiated in October 2018 (Table 2).

LBA-MW-39 FREE PRODUCT MONITORING & RECOVERY

No free product was detected during the January event. In total, 0.44 gallons of the free product was recovered during this reporting period; a total of 7.98 gallons of the free product have been removed since recovery was initiated in October 2018 (Table 3).

MW-50-160D FREE PRODUCT MONITORING & RECOVERY

Free product measuring was initiated on June 21, 2021 (Table 4). No free product was detected during the January 2023 monitoring event, and no free product was recovered during this reporting period.

MW-47A FREE PRODUCT MONITORING & RECOVERY

Free product measuring was initiated on September 16, 2022 (Table 5). No free product was detected during the January event. In total, 0.77 gallons of the free product was recovered during this reporting period; a total of 1.35 gallons of the free product have been removed since recovery was initiated in September 2022 (Table 5).

Subsequent semi-annual reports will continue to provide updates on the free product monitoring and recovery at groundwater wells that have free product present. As requested by the New York State Department of Environmental Conservation, free product measurements will also be reported in the semi-annual Progress Reports.

Please do not hesitate to contact me at (813) 520-4340 with any questions or concerns.

Sincerely yours,

Jeffrey Baker
Associate Vice President

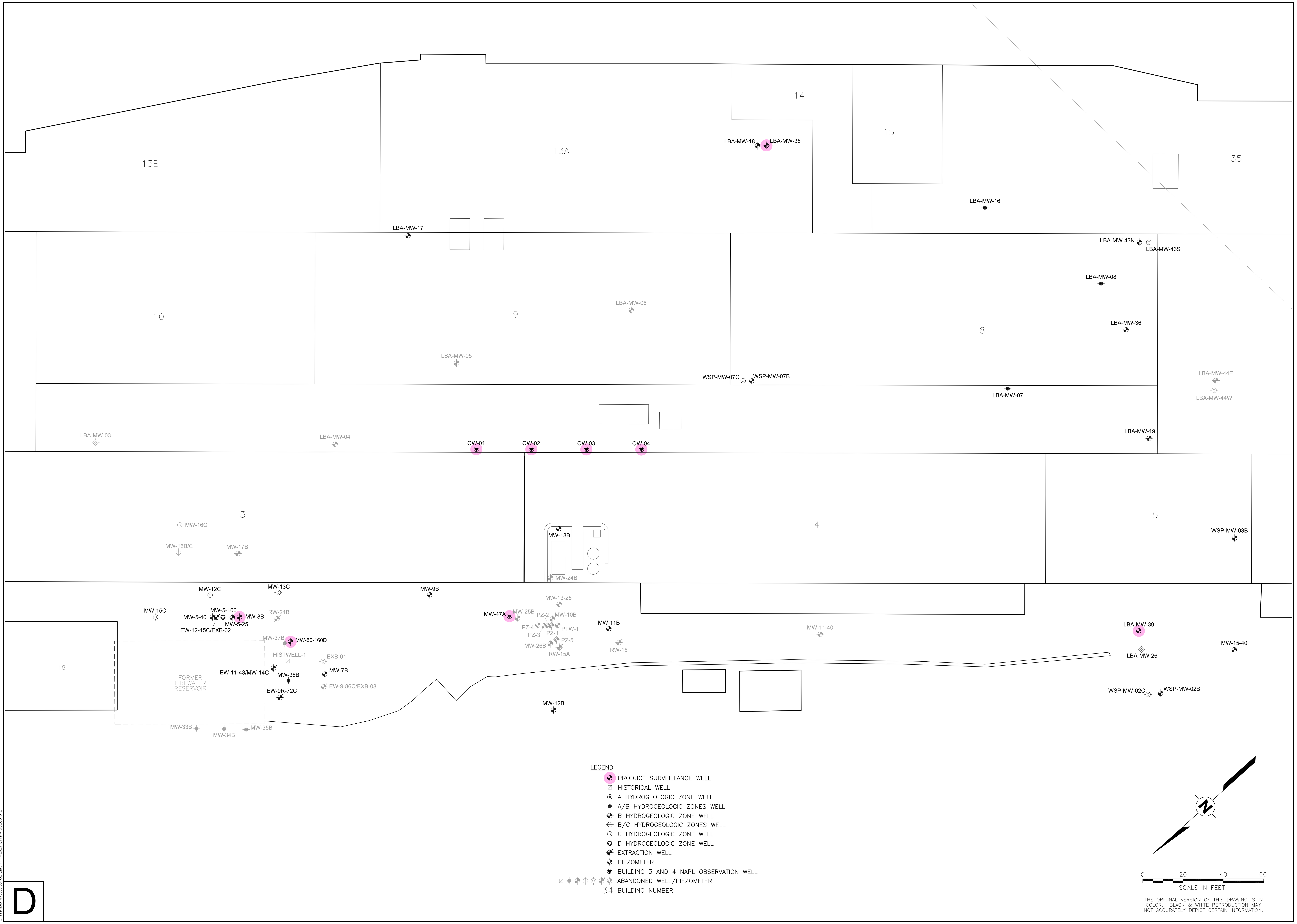
Scott Haitz
Senior Vice President

NTW:SLB:JRB
\\USHRN1SER01\es\Clients\Emerson\ITHACA\Product Surveillance and Recovery\2023 NYSDEC\Q1 and Q2

Enclosures

Cc/encl.: Anthony Perretta, NYSDOH
Steve Clarke, Emerson

FIGURE



13B
13A
14
15
35
10
9
8
3
4
5
18
LBA-MW-18
LBA-MW-35
LBA-MW-16
LBA-MW-17
LBA-MW-43N
LBA-MW-43S
LBA-MW-08
LBA-MW-06
LBA-MW-36
LBA-MW-05
WSP-MW-07C
WSP-MW-07B
LBA-MW-07
LBA-MW-44E
LBA-MW-44W
LBA-MW-03
LBA-MW-04
OW-01
OW-02
OW-03
OW-04
LBA-MW-19
MW-16C
MW-16B/C
MW-17B
MW-18B
MW-24B
WSP-MW-03B
MW-12C
MW-13C
MW-9B
MW-15C
MW-5-40
MW-5-100
MW-8B
MW-5-25
EW-12-45C/EXB-02
RW-24B
MW-37B
MW-50-160D
HISTWELL-1
EXB-01
EW-11-43/MW-14C
MW-36B
MW-7B
EW-9-86C/EXB-08
EW-9R-72C
FORMER FIREWATER RESERVOIR
MW-33B
MW-34B
MW-35B
MW-13-25
MW-47A
MW-25B
PZ-2
MW-10B
PZ-4
PTW-1
PZ-3
PZ-1
PZ-5
MW-26B
RW-15A
MW-11B
RW-15
MW-11-40
MW-12B
LBA-MW-39
LBA-MW-26
MW-15-40
WSP-MW-02C
WSP-MW-02B
LEGEND
PRODUCT SURVEILLANCE WELL
HISTORICAL WELL
A HYDROGEOLOGIC ZONE WELL
A/B HYDROGEOLOGIC ZONES WELL
B HYDROGEOLOGIC ZONE WELL
B/C HYDROGEOLOGIC ZONES WELL
C HYDROGEOLOGIC ZONE WELL
D HYDROGEOLOGIC ZONE WELL
EXTRACTION WELL
PIEZOMETER
BUILDING 3 AND 4 NAPL OBSERVATION WELL
ABANDONED WELL/PIEZOMETER
34 BUILDING NUMBER
N
0 20 40 60
SCALE IN FEET
THE ORIGINAL VERSION OF THIS DRAWING IS IN COLOR. BLACK & WHITE REPRODUCTION MAY NOT ACCURATELY DEPICT CERTAIN INFORMATION.
D

REVISIONS

REV	DESCRIPTION
	Revised: Chkd: Appr.:
	Revised: Chkd: Appr.:
	Revised: Chkd: Appr.:

SEAL

DATE

DRAWN BY	EGC	
CHECKED	SLB	11/14/2023
APPROVED		

PRODUCT SURVEILLANCE WELLS

FORMER EMERSON POWER TRANSMISSION
ITHACA, NEW YORK

PREPARED FOR
EMERSON
ST. LOUIS, MISSOURI

WSP USA Inc.
13530 DULLES TECHNOLOGY DR, SUITE 300
HERNDON, VA 20171
TEL: +1 703.709.6500

FIGURE 1

Drawing Number
314V5608.001-021

C:\\Temp\\314V5608.001-021.dwg 11/14/2023 1:31 PM USEC01012

TABLES

Table 1

Product Monitoring and Removal Summary - MW-8B
Former Emerson Power Transmission Facility
Ithaca, New York
First and Second Quarter 2023 (a)

Well Identification:	**MW-8B**
Casing Diameter (inches):	**2.00**
Top of Casing (ft asml):	**586.08**
Total Depth (feet):	**21.30**

Date (c)	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft amsl)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2023	-	-	-	-	-	-	-	-	0.44	20.07	0.04	1.99
January 17, 2023	NM	9.39	9.39	-	-	577.25	0.00	0.44	0.44	20.51	0.04	2.03
Second Quarter 2023	--	--	--	--	--	--	--	--	--	--	--	--

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 2

Product Monitoring and Removal Summary - LBA-MW-35
Former Emerson Power Transmission Facility
Ithaca, New York
First and Second Quarter 2023 (a)

Well Identification:	**LBA-MW-35**
Casing Diameter (inches):	**2.00**
Top of Casing (ft asml):	**612.59**
Total Depth (feet):	**32.00**

Date (c)	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft amsl)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2023	-	-	-	-	-	-	-	-	0.49	14.26	0.05	1.43
January 17, 2023	NM	5.60	5.60	-	-	606.99	0.00	0.44	0.44	14.71	0.04	1.47
Second Quarter 2023	--	--	--	--	--	--	--	--	--	--	--	--

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 3

Product Monitoring and Removal Summary - LBA-MW-39
Former Emerson Power Transmission Facility
Ithaca, New York
First and Second Quarter 2023 (a)

Well Identification:	**LBA-MW-39**
Casing Diameter (inches):	**2.00**
Top of Casing (ft asml):	**583.06**
Total Depth (feet):	**25.50**

Date (c)	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft amsl)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2023	-	-	-	-	-	-	-	-	0.45	7.54	0.05	0.75
January 17, 2023	NM	18.55	18.55	-	-	564.51	0.00	0.44	0.44	7.98	0.04	0.80
Second Quarter 2023	--	--	--	--	--	--	--	--	--	--	--	--

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

c/ Measurements were collected monthly until September 2020 and after September 2020 measurements were collected quarterly. Free product was continuously collected using sorbent socks.

Table 4

Product Monitoring and Removal Summary - MW-50-160D
Former Emerson Power Transmission Facility
Ithaca, New York
First and Second Quarter 2023 (a)

Well Identification:	**MW-50-160D**
Casing Diameter (inches):	**4.00**
Top of Casing (ft asml):	**587.42**
Total Depth (feet):	**163.53**

Date	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft amsl)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2023	-	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00
January 17, 2023	NM	129.88	129.88	-	-	456.54	0.00	0.00	0.00	0.00	0.00	0.00
Second Quarter 2023	--	--	--	--	--	--	--	--	--	--	--	--

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.

Table 5

Product Monitoring and Removal Summary - MW-47A
Former Emerson Power Transmission Facility
Ithaca, New York
First and Second Quarter 2023 (a)

Well Identification:	**MW-47A**
Casing Diameter (inches):	**4.00**
Top of Casing (ft asml):	**586.70**
Total Depth (feet):	**18.75**

Date	Depth to Product (ft btoc)	Depth to Water (ft btoc, b)		Apparent Product Thickness (feet)	Apparent Product Volume (gallons)	Groundwater Elevation (ft amsl)	Product Removal (gallons)				Water Removed (gallons)	
		Measured	Corrected				Bailer	Absorbent Sock	Total Quarterly	Total Cumulative	Total Quarterly	Total Water Bailed
Previous to First and Second Quarter 2023	-	-	-	-	-	-	-	-	0.58	0.58	0.06	0.06
January 17, 2023	NM	11.90	11.90	-	-	574.80	0.00	0.77	0.77	1.35	0.08	0.14
Second Quarter 2023	--	--	--	--	--	--	--	--	--	--	--	--

a/ Abbreviations: NM = no measureable product; "-" = not applicable; "--" = measurement not taken; ft btoc = feet below top of casing; amsl = above mean sea level; ft amsl = feet amsl; LNAPL = light non-aqueous phase liquid.

b/ All depth to water measurements were corrected to account for the depression caused by the weight of the light phase free product. For correction of the depth to water, the free phase product specific gravity of 0.90 was used.